Appendix C
Military Decisionmaking Process and Tactical Mission Graphics

The basic tenets of Army doctrine are initiative, depth, agility, synchronization, and versatility. If commanders and staffs are to adhere to these tenets, they need information in a format that assists them to adapt quickly to the changing factors of METT-T. The graphics portrayed in Chapters 3 through 5 are used to plot locations and directions of movement; however, the decision maker normally requires additional information not readily available by studying a current situation map. The battlefield envisioned by our current doctrine requires rapid and frequent changes in task organization of units to retain or take the initiative and move optimally task-organized forces to the critical point on the battlefield. Military decisionmaking process graphics are a tool for portraying the necessary information.

STATUS AND ASSESSMENT CHARTS

Commanders require two general categories of information when analyzing the situation map: the status of equipment and personnel, and the composition of the task-organized forces. Two common methods for displaying information and identifying status are the bar chart and the gumball chart.

Bar Chart

The bar chart is used to display quantities or percentages. Its major advantage is that it provides a simple method for comparing status indicators to each other and to a set, standard reference point. Bar charts also give the staff flexibility to display and relate various types and combinations of information for the commander. Figure C-1, page C-2, shows examples of various styles and information.

Gumball Chart

The gumball chart provides a clear picture of the status of designated elements using a color code established in the unit standing operating procedures. The chart assists the commander to quickly assess the status of critical elements and assists the staff to focus on problem areas. The color code chosen should be consistent throughout all echelons of the command. The following is a commonly used color code: GREEN indicates that the unit is at 85 percent or greater strength (combat capable); AMBER indicates that the unit is at 70 to 84 percent strength (combat capable with minor deficiencies); RED indicates that the unit is at 50 to 69 percent strength (combat ineffective, unit has major losses or deficiencies); and BLACK indicates that the unit is at less than 50 percent strength (requires reconstitution before next mission). See the example in Figure C-2, page C-3.
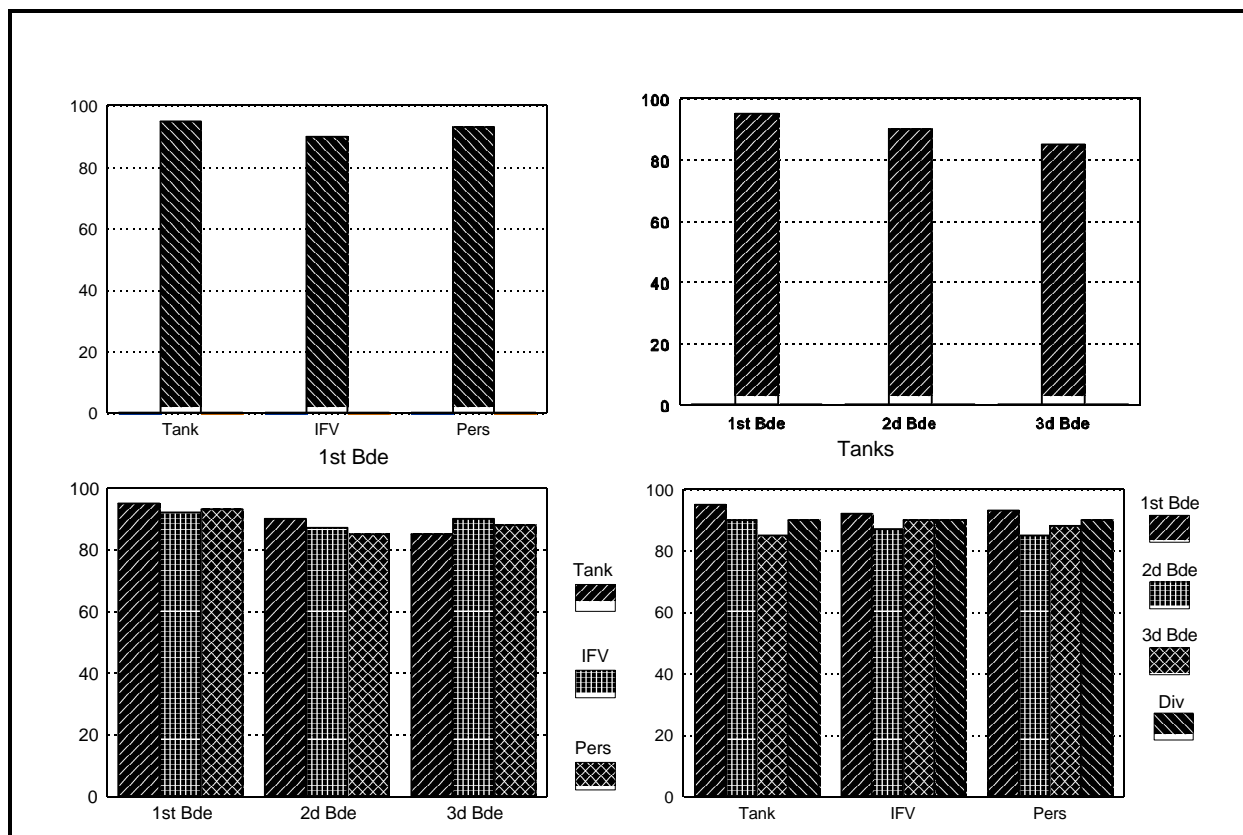
Figure C-1. Example Bar Type Status Charts

Combat Effectiveness Graphics

Situation reports (SITREPs) focus on the collection of information about the ability of subordinate units to perform their mission. Appropriate staff elements use various formats to report factors such as the status of fuel, ammunition, vehicle availability, and personnel. The task force commander, however, provides the net assessment of his unit's ability to perform the mission. This assessment can be expressed using decision graphics as shown in Figure C-3, page C-4.

The center column of Figure C-3 visually depicts the overall combat rating of the unit, and the right column specifies the status of selected items of interest. The standing operating procedures (SOP) will specify the items of interest to be reported higher. The subordinate commander may add to this list for his internal reporting and tracking. The four items shown in the right column are ammunition, weapons, POL, and personnel.

	Overall	Tanks	BFVs	Pers
1st Brigade	◯	◯	◯	◯
2d Brigade	◯	◯	◯	◯
3d Brigade	◯	◯	◯	◯

	Now	24 hours	48 hours
1st Brigade	◯	◯	◯
Tanks	◯	◯	◯
BFVs	◯	◯	◯
Personnel	◯	◯	◯
2d Brigade	◯	◯	◯
Tanks	◯	◯	◯
BFVs	◯	◯	◯
Personnel	◯	◯	◯
3d Brigade	◯	◯	◯
Tanks	◯	◯	◯
BFVs	◯	◯	◯
Personnel	◯	◯	◯

Figure C-2. Example of Gumball Charts
Note: The circles (gumballs) would be filled in with appropriate colors (GREEN/AMBER/RED/BLACK).

Commander's Assessment of Ability to Perform Mission	Effectiveness Pie Chart	Selected Status Pie Chart
"No Problem"		Personnel / Ammo / POL / Weapons
"Some Problems" (Personnel)		
"Major Problems" (Weapon Systems)		
"Can't Perform Mission" (Personnel, Ammunition, Weapon Systems)		

Figure C-3. Example of Combat Effectiveness Graphics

TASK-ORGANIZED COMPOSITION GRAPHICS

The assets available to a commander are established in the operation order and may be later modified by fragmentary and warning orders. The composition of task-organized forces may be portrayed by using the standard symbol system. These symbols do not provide decision makers with a graphic portrayal of information relating to task-organized composition. Figure C-4 on this page and C-5 on the next page show a task force organized around the headquarters of the 1st Battalion, 72d Infantry Regiment (Mechanized), of the 1st Brigade, 52d Infantry Division (Mechanized). The task force unit symbol (Figure C-4) does not tell the decision maker how the unit is organized or what the overall combat effectiveness may be.

Although this data may be available through other charts, reports, and briefings, its impact can be lost when it is in various locations. Figure C-5 shows TF 1-72 as a task-organized composition graphic. Figure C-6 on page C-6 shows examples of "shorthand" unit symbols for use as decision graphics.
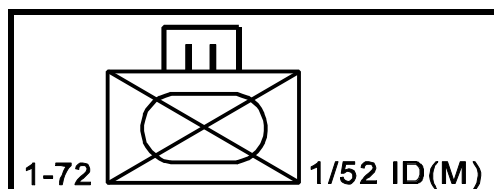
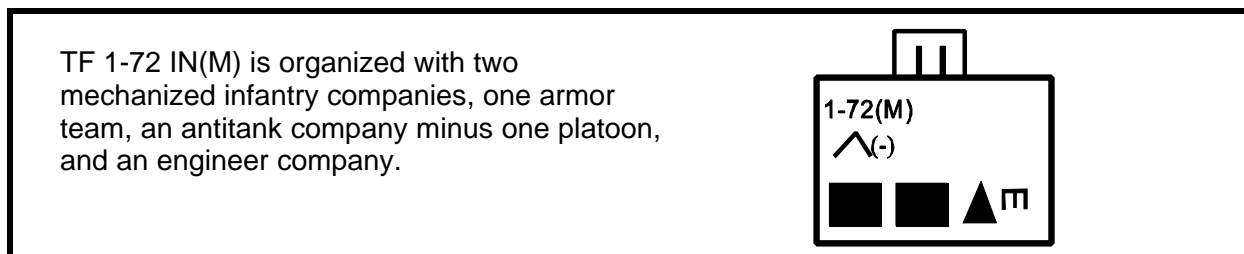**Figure C-4. Task Force Unit Symbol**

TF 1-72 IN(M) is organized with two mechanized infantry companies, one armor team, an antitank company minus one platoon, and an engineer company.

1-72(M)

Figure C-5. Example of a Task-Organized Composition Graphic

Armor	
Armored Cavalry	
Infantry	
Air Assault Infantry	
Airborne Infantry	
Light Infantry	
Mechanized Infantry	
Mountain Infantry	
Medium	
Antitank (Mechanized)	

Figure C-6. Shorthand Unit Symbols

C-5

Engineer	
Air Defense	
Artillery	
Attack Helicopter	
Air Cavalry	
Lift/Assault Helicopters	

Figure C-6. Shorthand Unit Symbols (Continued)

DECISION GRAPHICS

Combat effectiveness graphics and task-organized composition graphics can be combined to form decision graphics. Examples of composite decision graphics at the company/team, battalion/task force, and brigade levels are at Figures C-7, 8, and 9. Green, amber, red, or black can be used for the fill colors or outlines of the unit decision graphics to show the status of the subordinate units**.**

Subordinate units are assumed to be one echelon lower than the parent organization. If any subordinate unit is not one echelon lower, a size indicator should be used for clarity. For example, Task Force 1-6 Armor shows the platoon size indicator over the air defense artillery platoon shorthand symbol (Figure C-8) because the platoon is two echelons lower than the parent organization (TF 1-6 Armor). Figure C-9 shows an example of a brigade-level decision graphic.
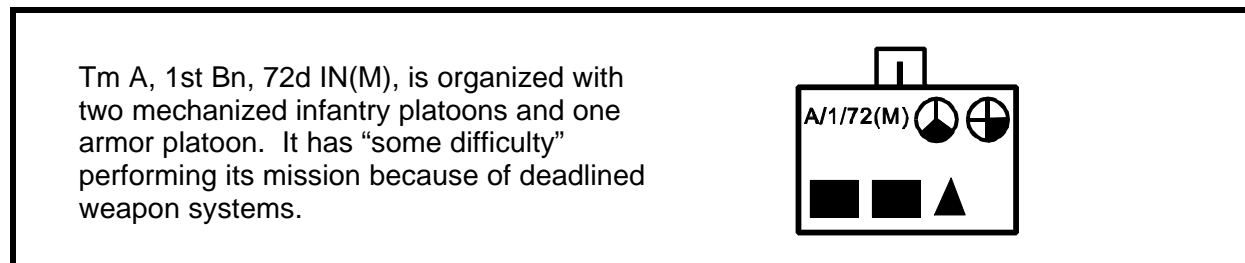
Tm A, 1st Bn, 72d IN(M), is organized with two mechanized infantry platoons and one armor platoon. It has "some difficulty" performing its mission because of deadlined weapon systems.

Figure C-7. Example Company Team Decision Graphic

TF 1-6 AR is organized with two armor teams, two mechanized infantry teams, and an air defense platoon. It has "major problems" in performing its mission because of a shortage of personnel and weapon systems.
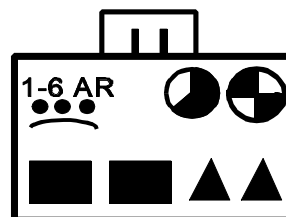
Figure C-8. Example of a Task Force Decision Graphic

1st Bde, 52d ID(M), is organized with two mechanized infantry battalions, one armor battalion, and an attack helicopter battalion. It has "no problems" in performing the mission.
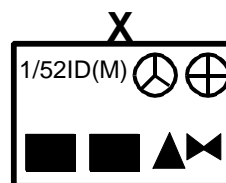
Figure C-9. Example of a Brigade Decision Graphic

MISSION GRAPHICS

Tactical task graphics are for use in course of action sketches, synchronization matrixes, and maneuver sketches. They do not replace any part of the operation order.   The graphics should be scaled to fit the map scale and size of unit for which they are being used. The examples shown here are for illustration purposes only. Where practical the task graphic should connect with the decision graphic or unit graphic where the "Q" labeling field is (center of the bottom of the symbol).

Figure C-10 below shows that the 1st Brigade, 52d Infantry Division (Mechanized), is task-organized with two mechanized infantry battalions, an armor (tank) battalion, and an attack helicopter battalion. It has no deficiencies. Its task is to seize objective Tina. The 2d Brigade, 52d Infantry Division (Mechanized), is task-organized with two mechanized infantry battalions and two armor (tank) battalions. It has no deficiencies. Its task is to follow and support the first brigade.
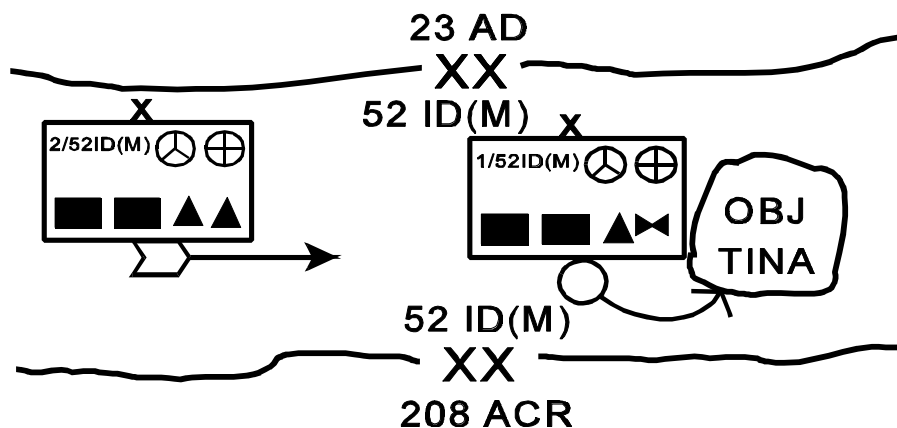
Figure C-10. Example of Use of Decision Graphics and Mission Graphics